Application No.: 09/663,845 Docket No.: ION-002/DIV

AMENDMENTS TO THE CLAIMS

Prior to examination, please cancel claims 1-20, and add new claims 21-27 as follows:

1-20. (canceled)

21. (New) A method for adhering a first surface of a first product to a second surface of a second product using a thermo-reversible, crosslinkable elastomer comprising the steps of:

applying the thermo-reversible, crosslinkable elastomer to the first surface of the first product;

applying the thermo-reversible, crosslinkable elastomer to the second surface of the second product; and

adhering the first surface of the first product to the second surface of the second product to form a bonded product;

wherein the thermo-reversible, crosslinking elastomer capable of reversibly causing dissociation and formation of a crosslinked structure by temperature change in which a hydrogen bond reaction between nitrogen-containing heterocycles is utilized for crosslinking is used as an adhesive.

- 22. (New) The method of claim 21, further comprising the steps of: heating the bonded product; and dissociating the first product from the second product.
- 23. (New) The method of claim 21, further comprising the step of molding the bonded product.
 - 24. (New) A method for recycling a product, said product comprising:

a first product and a thermo-reversible, crosslinking elastomer capable of reversibly causing dissociation and formation of a crosslinked structure by temperature change in which a hydrogen bond reaction between nitrogen-containing heterocycles is utilized for crosslinking;

Application No.: 09/663,845 Docket No.: ION-002/DIV

and comprising the step of:

heating the product;

whereby the first product can be dissociated from the thermo-reversible, crosslinking elastomer.

- 25. (New) The method of recycling of claim 24, wherein the product comprises more then two layers and at least one layer is the thermo-reversible, crosslinking elastomer.
- 26. (New) The method of recycling of claim 24, wherein the product is a molded poduct.
- 27. (New) A method for recycling a product, said product having at least one thermoreversible, crosslinking elastomer layer and at least one product layer, comprising the step of: heating the product;

whereby the product layer can be dissociated from the thermo-reversible, crosslinking elastomer layer.